



CHARLOTTE-MECKLENBURG STORM WATER SERVICES GENERIC DETAIL REQUIREMENTS

VEGETATED GEOGRID

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER

1 OF 3

REV. DATE | REV. #

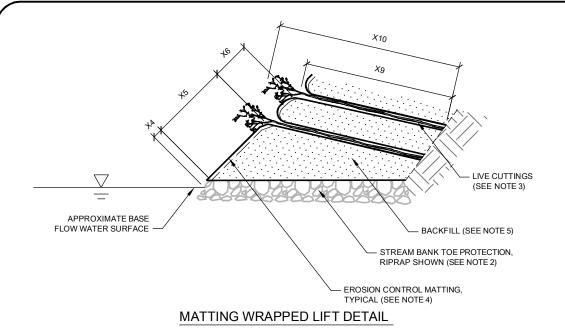
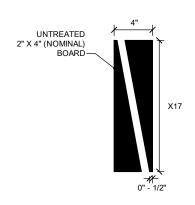
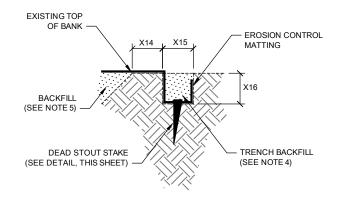




PHOTO: VEGETATED GEOGRID UNDER CONSTRUCTION





TOP OF BANK FABRIC ANCHOR DETAIL

DEAD STOUT STAKE DETAIL

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE.

THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

NOT TO SCALE



CHARLOTTE-MECKLENBURG
STORM WATER SERVICES
GENERIC DETAIL REQUIREMENTS

VEGETATED GEOGRID

V IXLV.

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER
2 OF 3

REV. DATE REV. #

DIMENSIONS (VALUES TO BE PROVIDED BY DESIGNER)			
VARIABLE	VALUES	TYPICAL UNIT	DESCRIPTION
X1		IN. OR FT.	VEGETATED GEOGRID PLACEMENT FROM TOP OF BANK
X2		FT.	VEGETATED GEOGRID HEIGHT
Х3		IN. OR FT.	TOE PROTECTION HEIGHT
X4		IN. OR FT.	VEGETATED GEOGRID RELATIONSHIP TO APPROXIMATE BASE FLOW WATER LEVEL
X5		IN. OR FT.	FIRST SOIL LIFT FACE HEIGHT
X6		IN. OR FT.	SOIL LIFT FACE HEIGHT
X7		FT.	BASE WIDTH OF STREAM BANK/SLOPE REPAIR
X8		IN. OR FT.	TOP WIDTH OF STREAM BANK/SLOPE REPAIR
Х9		IN. OR FT.	WIDTH OF LIFTS (MIN. AND MAX. IF APPLICABLE)
X10		IN. OR FT.	LIVE CUTTING LENGTH
X11		IN.	LIVE CUTTING DIAMETER (MIN. AND MAX.)
X12		IN. OR FT.	DEAD STOUT STAKE SPACING - TOP OF ANCHOR
X13		IN. OR FT.	MATTING STAKE SPACING
X14		IN. OR FT.	TOP OF BANK ANCHOR TRENCH SETBACK FROM TOP OF BANK
X15		IN. OR FT.	TOP OF BANK ANCHOR TRENCH WIDTH
X16		IN.	TOP OF BANK ANCHOR TRENCH DEPTH
X17		IN.	DEAD STOUT STAKE LENGTH
X18		IN.	LIVE CUTTING SPACING
X19		NONE	BANK SLOPE (HORIZONTAL COMPONENT)
X20		FT.	SLOPE/BANK HEIGHT

NOTES:

- VEGETATED GEOGRID SHALL CONSIST OF LIVE CUTTINGS PLACED BETWEEN SOIL LIFTS WRAPPED WITH EROSION CONTROL MATTING.
- VEGETATED GEOGRID MAY BE INSTALLED OVER A STREAM BANK TOE PROTECTION MEASURE (E.G.
 – BOULDER OR RIP RAP TOE PROTECTION, ROOT WADS; ETC.). INFORMATION REGARDING TOE
 PROTECTION ACTIVITIES SHALL BE ADDED TO THE VEGETATED GEOGRID DETAIL OR DETAILED
 SEPARATELY AND REFERENCED HEREIN.
- 3. THE LIVE CUTTINGS USED IN THE VEGETATED GEOGRID SHALL BE SPECIFIED BY THE DESIGNER (SPECIES, LENGTH, DIAMETER) AND SHOWN IN THIS DETAIL IN A TABLE OR ELSEWHERE IN THE PLANS (E.G. – A PLANTING PLAN) AND REFERENCED HEREIN. ADDITIONAL INFORMATION ABOUT LIVE CUTTINGS INCLUDING HARVESTING AND HANDLING INFORMATION SHALL BE DETAILED IN THE SPECIFICATIONS.
- 4. EROSION CONTROL MATTING SHALL BE OF A TYPE SPECIFIED BY THE DESIGNER. IT SHALL BE USED TO WRAP THE SOIL LIFTS AND ALSO BE PLACED FLAT AND STAKED AGAINST ALL OTHER PREPARED (GRADED, TILLED, SMOOTHED, ETC.) AND SEEDED AND MULCHED SLOPES. ADDITIONAL INFORMATION REGARDING EROSION CONTROL MATTING, SLOPE PREPARATION, AND SEEDING/MULCHING SHALL BE ADDED TO THE VEGETATED GEOGRID DETAIL OR DETAILED SEPARATELY AND REFERENCED HEREIN.
- THE SOIL PLACED BELOW, WITHIN, AND ABOVE THE LIFTS SHALL BE AMENDED AS SPECIFIED BY THE DESIGNER. ALSO THE DESIGNER SHALL SPECIFY MAXIMUM LIFT HEIGHT AND COMPACTION REQUIREMENTS. INSTALLATION OF VEGETATED GEOGRID SHALL PROGRESS GENERALLY AS FOLLOWS:
 - A. TOE PROTECTION SHALL BE INSTALLED AS SPECIFIED BY THE DESIGNER.
 - B. PLACE LAYER OF EROSION CONTROL MATTING OVER TOE PROTECTION. MATTING SHALL EXTEND OVER THE TOE PROTECTION TO THE FACE OF THE EXISTING SLOPE. A SUFFICIENT AMOUNT OF MATTING SHOULD REMAIN TO WRAP THE FACE OF THE SOIL LIFT AND EXTEND BACK ON TOP OF THE LIFT A MINIMUM DISTANCE SPECIFIED BY THE DESIGNER.
 - C. PLACE FIRST LIFT OF SOIL OVER THE MATTING. THIS LIFT SHALL BE THE SPECIFIED LIFT HEIGHT AT THE "BACK" OF THE LIFT (WHERE IT MEETS THE EXISTING SLOPE FACE). THE LIFT SHALL SLOPE UPWARD TOWARD THE PROPOSED SLOPE FACE TO ACHIEVE THE SPECIFIED SLOPE OF THE PROPOSED STREAM BANK FACE.
 - D. COMPACT SOIL LIFTS AS SPECIFIED BY THE DESIGNER.
 - E. WRAP COMPACTED SOIL LIFT WITH THE REMAINING EROSION CONTROL MATTING.
 - F. PLACE LAYER OF LIVE CUTTINGS ON TOP OF THE LIFT AT THE SPECIFIED SPACING. THE BASAL ENDS OF THE LIVE CUTTINGS SHALL CONTACT THE FACE OF THE EXISTING SLOPE AND SHALL PROJECT NO MORE THAN 6 INCHES FROM THE PROPOSED SLOPE FACE.
 - G. CONSTRUCT REMAINING LIFTS IN SIMILAR FASHION AT THE SPECIFIED HEIGHT(S).
 - $\mbox{H.} \mbox{ THE FACE OF THE COMPLETED VEGETATED GEOGRID SHALL MATCH THE PROPOSED BANK SLOPE.$
- 6. THE PLAN VIEW ILLUSTRATES A PERPENDICULAR PERSPECTIVE OF EACH SURFACE DEPICTED IN THE CROSS SECTION. THERE IS NO FORESHORTENING OF THE STREAM BANK (OR ANY OTHER SLOPED SURFACE) IN THE PLAN VIEW.

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE.

THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

NOT TO SCALE



CHARLOTTE-MECKLENBURG STORM WATER SERVICES GENERIC DETAIL REQUIREMENTS VEGETATED GEOGRID

3 OF 3

REV. DATE REV.#

DRAFT - NOT TO BE USED FOR CONSTRUCTION